Summary of the Fall, 2014 SW673 Class

<table>
<thead>
<tr>
<th>Course</th>
<th>SW 673, Statistics in Policy Analysis and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor</td>
<td>Mickey Sperlich</td>
</tr>
<tr>
<td>Office</td>
<td>B684 School of Social Work Building</td>
</tr>
<tr>
<td>Phone</td>
<td>734-395-1305</td>
</tr>
<tr>
<td>e-mail</td>
<td><a href="mailto:sperlich@umich.edu">sperlich@umich.edu</a></td>
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<tr>
<td></td>
<td>Please write ‘SW673’ in the subject heading of emails.</td>
</tr>
<tr>
<td>Class Time</td>
<td>Wednesdays, 9am-12pm</td>
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<tr>
<td>Class Location</td>
<td>B684 School of Social Work Building</td>
</tr>
<tr>
<td>Office Hours</td>
<td>Immediately following class or by appointment.</td>
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**Course Description:**

This course is designed to introduce students to statistics and statistical methods. It is intended and designed for students who have little or no familiarity with statistics and who may want to learn at a relatively slow pace so that their knowledge base is built on a solid foundation. The course content will integrate the core themes related to multiculturalism and diversity; social justice and social change; promotion, prevention, treatment, and rehabilitation through the data sets and examples that are used to highlight statistical concepts. Students in this course will acquire the skills to comprehend simple statistical reports related to social policy and program evaluation. Students will be able to assess the value and limitations of rates, measures, and statistical estimates. This course will help students develop the ability to use simple quantitative methods to describe real world situations in social work settings and to make ethical inferences and decisions based on the statistical results. Students will learn to choose methods of statistical analysis to improve social policy decisions and service delivery programs. Students will learn to understand and use appropriate language with their statistical analyses to clarify meaning and to explain the inferences that can be appropriately made from specific data. Finally, students will learn to construct basic reports that include meaningful charts, tables, and graphs for various audiences and that provide text that is appropriate for different audiences.

**Complete description of the course and its place in the MSW program**

**Course Content and Objectives:**

This course focuses on learning the direct application of analytical skills and the ethical reporting of analytical results. Students will review the use of simple rates, averages, and other statistics. Students will conduct, interpret, and present statistical analyses to various audiences. Students will receive a brief introduction to the theoretical foundations of descriptive and inferential statistics. Students will practice the appropriate choice of statistics based on available data, the problem to be addressed, and the audience for the analysis. Students will learn the importance of the difference between causality and correlation. Students will learn to interpret, prepare, and report on statistical analyses of problems in policy analysis and evaluation.
By the end of the semester, students will be able to:

- analyze extant research for its use and abuse of outcomes and measures of social justice, social change, and diversity
- construct rates, means, proportions and other simple statistics and interpret them appropriately;
- ethically use and ethically report on the results of statistical analyses;
- identify appropriate simple statistical methods to use in policy and program evaluation situations;
- conduct basic statistical analyses of common policy and program evaluation situations;
- use basic descriptive statistics and test simple hypotheses to answer policy or evaluation questions
- construct meaningful and readable charts, tables, and graphs of appropriate data;
- prepare written, oral and visual reports for different audiences using appropriate statistical language.

❖ Relationship to Four Curricular Themes and Ethics and Values:

Multiculturalism and Diversity: Students will develop the capacity to identify ways in which gender, race, ethnicity, social class, age and other forms of social stratification and disenfranchisement in the community influence and are affected by the decisions made from statistical analyses and related methodologies.

Social Change and Social Justice: The ability to assess policies and programs analytically is necessary if the social work profession is to play an important role in shaping the outcome of ongoing program and policy debates to reflect issues in social change and justice. This course provides students with the capacity to understand and influence the role statistical analysis and the interpretation of such analysis play in the formation and implementation of policy, practice and program development.

Promotion and Prevention: Prevention and promotion activities are difficult to evaluate and therefore raise special challenges in statistical analysis. It is important to expose students to the language of statistics so that they may comprehend useful and appropriate statistical techniques for different problems. In this way they may analyze and evaluate promotion and prevention activities prior to the development, implementation, and analysis of any relevant policy issue or initiative that they encounter in the course of their professional activities.

Social Science: Social workers should examine the ways in which social science data is translated into current policy and practice and the consequences (both positive and negative) that emerge from statistical analyses. This course provides students with the capacity to understand and influence the role statistical analysis plays in the formation and implementation of policy, practice and programs.

Relationship of this Course to Social Work Ethics and Values: Ethical standards of research methods (NIH guidelines), social work practice (NASW Code of Ethics) and evaluation practice (Program Evaluation Standards) will be used to review issues commonly found in the statistical analysis of policy and evaluation.
Course Resources

- **Required Text/Materials.**

  **Required Text:**

  **Required Statistical Program:**
  This course also requires a laptop and the SPSS statistical program. Please bring your laptop to class and please purchase a copy of SPSS 22 from the Computer Showcase (see [http://showcase.itcs.umich.edu/](http://showcase.itcs.umich.edu/)). The Showcase is in the basement of the Michigan Union. You can purchase SPSS for Windows or for the Mac and it costs $40. If you do not have a laptop, one will be provided in the classroom and will have SPSS already on them.

  **Additional Required Readings:**
  We will be doing in-class group assignments to facilitate learning about policy briefs; weekly readings of selected research articles and policy briefs, based on students’ specific interests (identified at first class meeting) are also required.

- **Class materials are available on the CTools web site.**

  All materials for class excepting the required textbook and SPSS program are available on our CTools site. To find our site, go to Wolverine Access and look for your classes, or go directly to ctools.umich.edu and sign in. You will need your uniqname and kerberos password to access the page. Only students registered for this class will have access to our site.

Course Assignments and Grades

- **Grades are earned through multiple in-class and homework assignments, and two tests:**

  Many students have some anxiety about statistics. The class is designed to address this by spreading the points across several assignments, and by including in-class opportunities for group activities so that students may learn from each other and practice together. Points in general are given based on completeness of the assignment, the correct use and interpretation of statistical or data output, grammar, structure, and readability, and effective and the comprehensive communication of your findings. Reference style for assignments is APA. A specific rubric for grading take-home assignments is provided.

  In-class group assignments will be based on a survey of students’ specific areas of interest, and will be finalized after the first class meeting. To facilitate learning from multiple perspectives, students may **NOT collaborate on group assignments with the same partners two weeks in a row.**

  All assignments will be turned in by the student and returned by the instructor through the CTools site. Grades will be posted to the CTools site as quickly as possible. If any student has difficulty understanding the use of CTools, classes are available through the university’s Information and Technology Services: [http://its.umich.edu/getconnected/](http://its.umich.edu/getconnected/). Students should familiarize themselves with University guidelines on academic integrity, including avoiding acts of plagiarism, and penalties for such: [http://www.lib.umich.edu/shapiro-undergraduate-library/understanding-plagiarism-and-academic-integrity](http://www.lib.umich.edu/shapiro-undergraduate-library/understanding-plagiarism-and-academic-integrity)

  Assignments are due to the CTools site at the beginning of class on the due date of the assignment. Late papers are only accepted with teacher permission prior to the due date of the assignment and will be subject to a reduced grade. Papers turned in late, regardless of reason will be subject to a 5 point reduction each day from the overall grade. Late papers will not be accepted beyond 4 days of lateness.
Overview of assignments and grades:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage of Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>In-class group assignments</td>
<td>32</td>
<td>There are ten in-class group work assignments but only eight will ultimately count toward your grade. The two assignments with the lowest scores will be dropped, OR you may use these for excused or unexcused absences or for any other reason. In-class assignments are assigned points but are unedited by the professor.</td>
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<td>Due Weekly</td>
<td>(4 pts. each class)</td>
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<tr>
<td>Test #1</td>
<td>08</td>
<td>Test #1 will cover lectures and readings through Rubin, chapter 13</td>
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<tr>
<td>Test #2</td>
<td>10</td>
<td>Test #2 will cover remaining lectures and readings excepting Rubin chapter 19</td>
</tr>
<tr>
<td>Assignment #1: Measurement</td>
<td>10</td>
<td>This assignment has two parts, which will be turned in and graded separately. All take home assignments will count toward your grade. Graded papers will include comments and critiques.</td>
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<tr>
<td>Assignment #1, Rationale</td>
<td>15</td>
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<td>Assignment #1, Survey Development</td>
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<td>Assignment #2: Analysis</td>
<td>6</td>
<td>This assignment has two parts, which will be turned in and graded separately. All take home assignments will count toward your grade. Graded papers will include comments and critiques.</td>
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<tr>
<td>Assignment #2, Research Planning</td>
<td>19</td>
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<tr>
<td>Assignment #2, Data Analysis and Presentation</td>
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<tr>
<td>Total</td>
<td>100</td>
<td>Final Course Grades Are Based on Total Percentage Points:</td>
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<td>A+ = 98-100, A = 94-97, A- = 90-93, B+ = 87-89, B = 82-86, B- = 78-81, C+ = 75-77, C = 70-74, not passing = &lt;70</td>
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SW673 Weekly Schedule, Fall 2014

*This schedule and assignment list will be updated after our first class session. Additional readings for group assignments will be identified and posted at that time. Our schedule may continue to change slightly depending on the needs of the class, as determined by the instructor.*

<table>
<thead>
<tr>
<th>Class Date</th>
<th>Reading</th>
<th>Agenda</th>
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<tbody>
<tr>
<td>September 3rd</td>
<td>PRIOR to class read:</td>
<td><em>Topics covered:</em> Introduction to Course Goals and Objectives Overview of Evidence-Based Practice Brief Introduction to Various Statistics</td>
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<tr>
<td></td>
<td>Rubin: Chapter 1</td>
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<td></td>
<td>Chapter 2</td>
<td></td>
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<td></td>
<td>PRIOR to class read:</td>
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<tr>
<td></td>
<td>Rubin: Chapter 3</td>
<td><em>Topics covered:</em> Intro to Research Process Levels of Measurement Descriptive Statistics</td>
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<td></td>
<td>Chapter 4</td>
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<td>Chapter 5</td>
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<tr>
<td></td>
<td>Appendixes A &amp; B</td>
<td></td>
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<tr>
<td></td>
<td>*Assigned readings for 1st group assignment</td>
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<tr>
<td></td>
<td>on human trafficking:</td>
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<tr>
<td></td>
<td>Oram, Stöcki, Busza, Howard, &amp;</td>
<td></td>
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<tr>
<td></td>
<td>PRIOR to class read:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rubin: Chapter 3</td>
<td><em>Group assignment #1</em></td>
</tr>
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<td></td>
<td>Chapter 3</td>
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<td>Chapter 4</td>
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<td></td>
<td>Chapter 5</td>
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</tr>
<tr>
<td>Date</td>
<td>PRIOR to class read:</td>
<td>Topics covered:</td>
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<td>September 17th</td>
<td>Zimmerman, 2012: Wheaton, Schauer, &amp; Gall, 2010</td>
<td>Academic Literature Searches and Library Resources: Guest Lecturer, Susan Wortman, Librarian</td>
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<td>Brocke et al., 2009 article (“Reconstructing the Giant”)</td>
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<tr>
<td>September 24th</td>
<td>Rubin: Chapter 6 Chapter 7 Chapter 8 *Assigned reading for 2nd group assignment on juvenile justice: Henggeler &amp; Schoenwald, 2011</td>
<td>Measures of Central Tendency Measures of Dispersion Normal and Skewed Distributions</td>
</tr>
<tr>
<td>October 8th</td>
<td>Rubin: Chapter 16, 17 *Assigned reading for 4th group assignment on safety in schools for LGBTQ students: Russell, Koschw, Horn, Saewyc, 2010 Robinson &amp; Espelage, 2012</td>
<td>Assignment #1, Part 1 Due Today (“Rationale”)</td>
</tr>
<tr>
<td>October 22nd</td>
<td>Rubin: Chapter 14 *Assigned reading for 6th group assignment on immigration policy: Dreby, 2014 Steil &amp; Vasi, 2014</td>
<td>Introduction to Univariate and Bivariate Analyses, t-Tests Review Expectations for the Assignment #1</td>
</tr>
<tr>
<td>October 29th</td>
<td>Rubin: Chapter 16, 17</td>
<td>Assignment #1, Part 2 Due Today</td>
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*Assignment #1, Part 1 Due Today (“Rationale”)*
### Assigned reading for 7th group assignment on mental health & suicide:
- Opoliner, Azrael, Barber, Fitsmaurice, & Miller, 2014
- Andrade et al., 2013
- Lynch, 2014

**Topics covered:**
- Correlation
- Cross Tabulation, Chi-Squares

**COMPUTER LAB #3:**
- Correlation, Chi-Square

**Group assignment #7**

**November 5th**

**PRIOR to class read:**
- Rubin: Chapter 15

**Assigned reading for 8th group assignment on Early Head Start:**
- Green et al., 2014
- Jenkins, 2014

**Topics covered:**
- ANOVA/ANCOVA, MANOVA/MANCOVA

**COMPUTER LAB #4:**
- ANOVA

**Group assignment #8**

**November 12th**

**PRIOR to class read:**
- Rubin: Chapter 18, Appendix E

**Assigned reading for 9th group assignment on youth homelessness:**
- Shelton, Mackie, van den Bree, Taylor, & Evans, 2014
- Kidd, 2012

**Assignment #2, Part 1 Due Today**

**Topics covered:**
- Linear Regression
- Logistic Regression
- Review for Test #2.

**COMPUTER LAB #4:**
- Regression

**Group assignment #9**

**November 19th**

**Topics covered:**
- Regression continued

**TEST #2**

**November 26th**

**PRIOR to class read:**
- Rubin: Chapter 19

**Assigned reading for 10th group assignment on evaluation reporting:**
- Wilder Research, 2012
- CDC, 2011

**Topics covered:**
- Single-System Evaluation Designs

**Group assignment #10**

**December 3rd**

**Assignment #2, Part 2: Due before Midnight**

**December 10th**

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### Religious holiday policy at UM

"Although the University of Michigan, as an institution, does not observe religious holidays, it has long been the University's policy that every reasonable effort should be made to help students avoid negative academic consequences when their religious obligations conflict with academic requirements. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who expect to miss classes, examinations, or other assignments as a consequence of their religious observance shall be provided with a reasonable alternative opportunity to complete such academic responsibilities. It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent. Such notice must be given by the drop/add deadline of the given term. Students who are absent on days of examinations or class assignments shall be offered an opportunity to make up the work,"
Issues of disability and disability policy

If you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, in-class activities, and instruction methodology may be modified to facilitate your participation and progress. In addition to letting me know, make sure that you have contacted the Office of Services for Students with Disabilities (SSD), so that we can work together to help us determine appropriate academic accommodations. SSD (734-763-3000; http://ssd.umich.edu) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated as such. I ask that you inform me about your needs early in the semester, before the drop/add deadline.

Bibliography/Additional Resources


